



**STEM4CLIM8**  
2020-1-UK01-KA201-079141

"STEM4CLIM8" will introduce innovative educational methods based on STEM related applications in the topics of Climate Change and Natural Disasters, bridging the online and offline worlds in a hands-on educational play context.

## STEM4CLIM8 EDUCATIONAL MATERIALS

100%

DIY wooden and carton physical computing blocks, assembled in the classroom and programmed by the children to interact with a custom Minecraft world through the Raspberry GPIO

100%

A custom Minecraft world to generate awareness about climate change through the execution of missions involving natural disasters which are linked to climate change

75%

The STEM4CLIM8 missions brief comprises a series of missions to be completed in the STEM4CLIM8 Minecraft world, each mission exposing natural disasters connected to climate change, such as floods, earthquakes, wildfires, etc. The missions brief will comprise animated videos for each mission.

25%

Lesson plans for using the console with the custom world and the physical computing blocks in the classroom.

25%

A knowledge Dissemination portal to guide the users of the STE4CLIM8 educational pack on how and at which stage they can use the created tools and materials.

%

DIY wooden computer console to be assembled in the classroom based on a blueprint and used for the project learning activities

## IMPACT OF STEM4CLIM8 EDUCATIONAL MATERIALS



Among the envisaged impact of STEM4CLIM8 is an increase in the level of achievement and interest in STEM among school children through hands on educational play approaches which bridge the online and offline worlds rather than encouraging static content consumption leading to increased screen time.

Children will learn how to interact with a custom-made Minecraft world through physical blocks they will assemble themselves and on a computer console they will also assemble themselves. Important elements of programming (Minecraft visual programming and Minecraft modding), science (climate, geology & physics phenomena as part of the custom Minecraft world), engineering (electronics physical blocks assembled, connected and controlled through the Raspberry GPIO by custom code) are an integral part of the STEM4CLIM8 project in a playful approach which combines STEM will practical knowledge about climate change.

## PARTNERS



**HeartHands**  
SOLUTIONS  
HANDS ON KNOWLEDGE

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